

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: December 19, 2002, 14:53:42 ; Search time 16 Seconds
(without alignments)
1044.514 Million cell updates/sec

Title: US-08-813-323b-2
Perfect score: 3008
Sequence: 1 MESSKKMDSPGALQTNPLK.....TKDDTIFIKYIVDSLDLPDP 568

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep: *
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PCBUS.COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2831.5	94.1	543	4	US-08-697-610-2
2	2831.5	94.1	543	4	US-08-349-357-2
3	2251	74.8	438	4	US-09-268-544B-36
4	1692.5	56.3	347	4	US-09-268-544B-38
5	1253.5	41.7	558	4	US-09-138-277C-1
6	1192.5	39.6	557	4	US-09-138-277C-3
7	1118	37.2	228	4	US-09-181-958-2
8	837.5	27.8	501	1	US-08-131-394-4
9	837.5	27.8	501	1	US-08-250-858-4
10	837.5	27.8	501	1	US-08-446-915-4
11	837.5	27.8	501	1	US-08-744-139-4
12	837.5	27.8	501	5	PCR-US95-06639-4
13	628	20.9	409	1	US-08-331-394-2
14	628	20.9	409	1	US-08-250-858-2
15	628	20.9	409	1	US-08-446-915-2
16	628	20.9	409	2	US-08-744-139-2
17	628	20.9	409	5	PCR-US95-06639-2
18	563.5	18.7	417	3	US-08-705-771-18
19	560.5	18.6	470	2	US-08-691-814B-2
20	553	18.4	522	1	US-08-639-237-2
21	553	18.4	522	1	US-08-975-405-2
22	546.5	18.2	243	4	US-09-181-958-1
23	435	14.5	80	2	US-08-691-814B-29
24	381	12.7	73	2	US-08-691-814B-33
25	328	10.9	56	2	US-08-691-814B-25
26	314	10.4	56	2	US-08-691-814B-24
27	306	10.2	80	2	US-08-691-814B-31

28	294	9.8	80	2	US-08-691-814B-30	Sequence 30, Appl
29	260	8.6	46	2	US-08-691-814B-15	Sequence 15, Appl
30	249	8.3	46	4	US-09-052-089A-10	Sequence 10, Appl
31	210	7.0	67	2	US-08-691-814B-32	Sequence 32, Appl
32	186	6.2	70	2	US-08-691-814B-35	Sequence 35, Appl
33	181.5	6.0	70	2	US-08-691-814B-34	Sequence 34, Appl
34	144.5	4.8	606	4	US-08-477-831C-2	Sequence 2, Appl
35	144.5	4.8	1104	2	US-08-327-832-5	Sequence 5, Appl
36	144.5	4.8	1104	2	US-08-828-584-5	Sequence 10, Appl
37	143.5	4.8	3248	1	US-08-353-700-1	Sequence 1, Appl
38	143.5	4.8	3248	5	PCR-US95-16216-1	Sequence 6, Appl
39	140	4.7	2482	1	US-08-328-254-6	Sequence 11, Appl
40	139.5	4.6	631	4	US-08-477-831C-11	Sequence 4, Appl
41	132.5	4.4	419	3	US-09-100-391-4	Sequence 10, Appl
42	132.5	4.4	582	3	US-09-100-391-10	Sequence 17, Appl
43	132.5	4.4	712	2	US-08-468-576B-17	Sequence 17, Appl
44	132.5	4.4	712	2	US-08-468-579B-17	Sequence 17, Appl
45	132.5	4.4	712	3	US-08-468-577B-17	Sequence 17, Appl

ALIGNMENTS

RESULT 1
US-08-697-610-2
; Sequence 2, Application US/08697610
; Patent No. 6172187
GENERAL INFORMATION:
APPLICANT: Reed, John C.
APPLICANT: Sato, Takaaki
TITLE OF INVENTION: CD40 Associated Proteins
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell and Flores
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/697,610
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/349,357
FILING DATE: 02-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-LJ 1203
TELEPHONE: (619) 535-9001
TELEFAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 543 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-697-610-2

Query Match 94.1% Score 2831.5; DB 4; Length 543;
Best Local Similarity 95.2% Pred. No. 2.2e-245;
Matches 541; Conservative 0; Mismatches 2; Indels 25; Gaps 1;
QY 1 MESSKKMDSPGALQTNPLKLTHTDRSAGTPVPEBGGKKEKFKVTVEDKCYCECHLYL 60
DB 1 MESSKKMDSPGALQTNPLKLTHTDRSAGTPVPEBGGKKEKFKVTVEDKCYCECHLYL 60

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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-349-357-2

Query Match          94.1%; Score 2831.5; DB 4; Length 543;
Best Local Similarity 95.2%; Pred. No. 2,2e-245;
Matches 541; Conservative 0; Mismatches 2; Indels 25; Gaps 1

;
1 MESSKKNDSGALQTNPLKLTHTDRSAGTPVYVDEGGYKEKFKVTEDEYKCEKCHLV 60
;
1 MESSKKNDSGALQTNPLKLTHTDRSAGTPVYVDEGGYKEKFKVTEDEYKCEKCHLV 60
;
61 CSPPOTCGHRCFCESCMAALLSSSPKCTACQSEIYKDKVFNCKCKREILAQIYCRNE 120
;
61 CSPPOTCGHRCFCESCMAALLSSSPKCTACQSEIYKDKVFNCKCKREILAQIYCRNE 120
;
121 SRGCAEQLTGLHLVLKNDCHFEELPCVAPDCKEYLRKLDLADHYEAKCKYREATCSHC 180
;
121 SRGCAEQLTGLHLVLKNDCHFEELPCVAPDCKEYLRKLDLADHYEAKCKYREATCSHC 180
;
181 KSOVPMTALQKHEDTDCPCVYVSCPKKCSVQTLTRELSAHLSECVNAPSTCSFKRYGCV 240
;
181 KSOVPMTALQKHEDTDCPCVYVSCPKKCSVQTLTRELSAHLSECVNAPSTCSFKRYGCV 240
;
241 FQGTNOQIKRAHEASSAVOHVNLKEKNSLLEKVSLLQNESEYKKNKSIGSLHNQICSEFI 300
;
218 -GTNOQIKRAHEASSAVOHVNLKEKNSLLEKVSLLQNESEYKKNKSIGSLHNQICSEFI 275
;
301 EIEROKEMLRNNESKTLIHLQRYIDSQAEKLDELKEIREFPNOMEDADSMKSSVESLQNR 360
;
276 EIEROKEMLRNNESKTLIHLQRYIDSQAEKLDELKEIREFPNOMEDADSMKSSVESLQNR 335
;
361 VEELESVDKSAGVARNTEGLLESQLSRRHOMLVHDIRLADMDLRFQVLEFASVNGVLIW 420
;
336 VEELESVDKSAGVARNTEGLLESQLSRRHOMLVHDIRLADMDLRFQVLEFASVNGVLIW 395
;
421 KIRDYKRRKQEAVMGKTLISYQPEYTYGYFKMCARVYLNDGSGKSTHLSLFFVIMRG 480
;
396 KIRDYKRRKQEAVMGKTLISYQPEYTYGYFKMCARVYLNDGSGKSTHLSLFFVIMRG 455
;
481 EVDALLPWPFKQKVTILMDQSSSRHHGDAFAKPPNPNSSFFKPTGEMNINASGCPVEVAAQ 540
;
456 EVDALLPWPFKQKVTILMDQSSSRHHGDAFAKPPNPNSSFFKPTGEMNINASGCPVEVAAQ 515
;
;
541 TVLENGTYIKDPTIFIKYIVDTSDDPDP 568
;
516 TVLENGTYIKDPTIFIKYIVDTSDDPDP 543
;

RESULT 3
US-09-268-544B-36
; Sequence 36, Application US/09268544B
; Patent No. 6410710
; GENERAL INFORMATION:
; APPLICANT: Lederman, Seth
; APPLICANT: van Eyndhoven, Winfried
; TITLE OF INVENTION: TRAF-3 Deletion Isoforms And Uses Thereof
; FILE REFERENCE: 0575-58732
; CURRENT APPLICATION NUMBER: US/09/268,544B
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 36
; LENGTH: 438
; TYPE: PRT
; ORGANISM: Human
US-09-268-544B-36

Query Match          74.8%; Score 2251; DB 4; Length 438;
Best Local Similarity 77.1%; Pred. No. 1.7e-193;
Matches 438; Conservative 0; Mismatches 0; Indels 130; Gaps 1;

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Qy 1 MESSKKMDSGALQTNPLKLTHTDRSAGTPVPEEGGKKEKPKVTEDEKCKECHLVL 60
Db 1 MESSKKMDSGALQTNPLKLTHTDRSAGTPVPEEGGKKEKPKVTEDEKCKECHLVL 60
Qy 61 CSPKQTECGHRCFESCMALLSSSPKCTACQESIYKDVFKDNCKREILALQIYCRNE 120
Db 61 CSPKQTECGHRCFESCMALLSSSPKCTACQESIYKDVFKDNCKREILALQIYCRNE 120
Qy 121 SRGCAQLTGLHLVHLKNDCHFEELPCVPDPCKEYVLRKDLRDHYEAKCKTREATCSHC 180
Db 121 SRGCAQLTGLHLVHLKNDCHFEELPCVPDPCKEYVLRKDLRDHYEAKCKTREATCSHC 180
Qy 181 KSOVPMIALOKHEDTDCPCVVVSCPHKCSVQTLRSELSAHLSECVNAPSTCSFKRYGCV 240
Db 181 KSOVPMIA----- 188
Qy 241 FOGTNOQIKAHBASSAVOHVNLKENSLSLEKVSLLQNESVEKNKSIOSLHNOICSEFI 300
Db 189 ----- 188
Qy 301 EIEROKEMLRNNESKILHLORVIDSOAEKLELDEKIRPFQONWEADSMKSSVESLQNR 360
Db 189 ----- 188
Qy 361 VTELESVDKSAGOVARNRTGLLESOLSRHDQMLSVHDIRLADMDLRFQVLETSYNGVLIM 420
Db 231 VTELESVDKSAGOVARNRTGLLESOLSRHDQMLSVHDIRLADMDLRFQVLETSYNGVLIM 290
Qy 421 KIRDYKRRKOAVMGKTLSTLSQPFYTGFGYKMCARVYLVNGDGMKGTHLSLFFVIMRG 480
Db 291 KIRDYKRRKOAVMGKTLSTLSQPFYTGFGYKMCARVYLVNGDGMKGTHLSLFFVIMRG 350
Qy 481 EYDALLPMPFKOKVTLMMDGSSRRHLGDAFKPDPNSSFPPKPTGEMNIAAGCPVFAVQ 540
Db 351 EYDALLPMPFKOKVTLMMDGSSRRHLGDAFKPDPNSSFPPKPTGEMNIAAGCPVFAVQ 410
Qy 541 TVLENGTYIKDDTIFIKVIYVTSDDLPP 568
Db 411 TVLENGTYIKDDTIFIKVIYVTSDDLPP 438

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RESULT 4

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US-09-268-544B-38
; Sequence 38, Application US/09268544B
; Patent No. 6410710
; GENERAL INFORMATION:
; APPLICANT: Lederman, Seth
; APPLICANT: van Eyndhoven, Winfried
; TITLE OF INVENTION: TRAF-3 Deletion Isoforms And Uses Thereof
; FILE REFERENCE: 0575-58732
; CURRENT APPLICATION NUMBER: US/09/268, 544B
; CURRENT FILING DATE: 1999-03-11
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 38
; LENGTH: 347
; TYPE: PRT
; ORGANISM: Human
US-09-268-544B-38

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Query Match 56.3%; Score 1692.5; DB 4; Length 347;
Best Local Similarity 60.9%; Pred. No. 1,4e-143;
Matches 346; Conservative 0; Mismatches 1; Indels 221; Gaps 1;

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Qy 1 MESSKKMDSGALQTNPLKLTHTDRSAGTPVPEEGGKKEKPKVTEDEKCKECHLVL 60
Db 1 MESSKKMDSGALQTNPLKLTHTDRSAGTPVPEEGGKKEKPKVTEDEKCKECHLVL 60
Qy 61 CSPKQTECGHRCFESCMALLSSSPKCTACQESIYKDVFKDNCKREILALQIYCRNE 120
Db 61 CSPKQTECGHRCFESCMALLSSSPKCTACQESIYKDVFKDNCKREILALQIYCRNE 120
Qy 121 SRGCAQLTGLHLVHLKNDCHFEELPCVPDPCKEYVLRKDLRDHYEAKCKTREATCSHC 180
Db 121 SRGCAQLTGLHLVHLKNDCHFEELPCVPDPCKEYVLRKDLRDHYEAKCKTREATCSHC 180

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Db 100 ----- 99
Qy 181 KSOVPMIALOKHEDTDCPCVVVSCPHKCSVQTLRSELSAHLSECVNAPSTCSFKRYGCV 240
Db 100 ----- 99
Qy 241 FOGTNOQIKAHBASSAVOHVNLKENSLSLEKVSLLQNESVEKNKSIOSLHNOICSEFI 300
Db 100 ----- 99
Qy 301 EIEROKEMLRNNESKILHLORVIDSOAEKLELDEKIRPFQONWEADSMKSSVESLQNR 360
Db 100 ----- 139
Qy 361 VTELESVDKSAGOVARNRTGLLESOLSRHDQMLSVHDIRLADMDLRFQVLETSYNGVLIM 420
Db 140 VTELESVDKSAGOVARNRTGLLESOLSRHDQMLSVHDIRLADMDLRFQVLETSYNGVLIM 199
Qy 421 KIRDYKRRKOAVMGKTLSTLSQPFYTGFGYKMCARVYLVNGDGMKGTHLSLFFVIMRG 480
Db 200 KIRDYKRRKOAVMGKTLSTLSQPFYTGFGYKMCARVYLVNGDGMKGTHLSLFFVIMRG 259
Qy 481 EYDALLPMPFKOKVTLMMDGSSRRHLGDAFKPDPNSSFPPKPTGEMNIAAGCPVFAVQ 540
Db 260 EYDALLPMPFKOKVTLMMDGSSRRHLGDAFKPDPNSSFPPKPTGEMNIAAGCPVFAVQ 319
Qy 541 TVLENGTYIKDDTIFIKVIYVTSDDLPP 568
Db 320 TVLENGTYIKDDTIFIKVIYVTSDDLPP 347

```

RESULT 5

```

US-09-138-277C-1
; Sequence 1, Application US/09138277C
; Patent No. 6426403
; GENERAL INFORMATION:
; APPLICANT: NAKATA, MOTOMI
; APPLICANT: NAKATA, HIROYASU
; APPLICANT: YAGITA, HIDEO
; APPLICANT: OKUMURA, KO
; TITLE OF INVENTION: TRAF FAMILY MOLECULES, POLYNUCLEOTIDES ENCODING THEM,
; FILE REFERENCE: 007898-025515
; CURRENT APPLICATION NUMBER: US/09/138, 277C
; CURRENT FILING DATE: 1998-08-18
; PRIOR APPLICATION NUMBER: PCT/JP97/00512
; PRIOR FILING DATE: 1997-02-24
; PRIOR APPLICATION NUMBER: JP 34674/1996
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 1
; LENGTH: 558
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-138-277C-1

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Query Match 41.7%; Score 1253.5; DB 4; Length 558;
Best Local Similarity 41.6%; Pred. No. 6,2e-104;
Matches 241; Conservative 114; Mismatches 166; Indels 59; Gaps 10;

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Qy 22 HTDRSAGTP-VFVPEEGG-----YKEKFKVTEDEKCKECHLVLKSPKQTECGH 70
Db 3 HSEGOAIVPACAFIRONGNSISLDFEDTETQVEQLEENYKCAFCHSVLHNRHOGCGH 62
Qy 71 RFCSGCAALLS-SSSPKCTACQESIYKDVFKDNCKREILALQIYCRNESGCAEQLT 129
Db 63 RFCCOCIRSLRELNSVDPVDEKVIKPOEVFQDNCKREVLNLHYCKN-AGCANARII 121
Qy 130 LGHVLVHLKNDCHFEELPCVPDPCKEYVLRKDLRDHYEAKCKTREATCSHCQVPMIAL 189
Db 122 LGRFOHLOH-CSFOAVPCPNESCREFAMLRKDVKEHLVSAVCRREKCIYCKRDIYVTVNL 180

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Patent No. 5670319
GENERAL INFORMATION:
Applicant: Goeddel, David V.
Title of Invention: Tumor Necrosis Factor
Title of Invention: Receptor-Associated Factors
Number of Sequences: 66
Correspondence Address:
Address: Genentech, Inc.
Street: 460 Point San Bruno Blvd
City: South San Francisco
State: California
Country: USA
ZIP: 94080
COMPUTER READABLE FORM:
Medium Type: 5.25 inch, 360 Kb floppy disk
Computer: IBM PC compatible
Operating System: PC-DOS/MS-DOS
Software: Patin (Genentech)
CURRENT APPLICATION DATA:
Application Number: US/08/331,394
Filing Date:
Classification: 436
Prior Application Data:
Application Number: 08/250858
Filing Date: 27-MAY-1994
Attorney/Agent Information:
Name: Dregler, Ginger R.
Registration Number: 33,055
Reference/Docket Number: 897P1
Telecommunication Information:
Telephone: 415/952-3216
Telefax: 415/952-9881
Telex: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 501 amino acids
Type: amino acid
TOPOLOGY: linear
US-08-331-394-4

Query Match      27.8%; Score 837.5; DB 1; Length 501;
Best Local Similarity 33.6%; Pred. No. 1e-66;
Matches 196; Conservative 89; Mismatches 194; Indels 105; Gaps 17;

QY 3 SSKKMSPALQTNPPILKHTDTSAGTPVVPDGGYKEKPKVT-VEKYYKCEKHLVLC 61
DB 2 AAASVSPGSLLELP-----GFSKTLGTLEAKYLCASCKNITLR 42
QY 62 SPKOTEGGRFCESMAALLSSSPKCTAC-----QESI---VKDKVFKDNCCKREIILA 112
DB 43 RPPQACGHRGFCFLTSLSSGPQNCACVYEGLYEBGISLLESSAFPDMAARREVES 102
QY 113 LOIYCRNESRGAEOULTGLHLVHLKNDCHFEELPCVPRDCKEYLRKDLRDHVEKACKY 172
DB 103 LPAYCPND--GCTWKGTLKEYESCHGELCPFLTEC--PACKGLVRLSEKHNTEOECPK 158
QY 173 REATGCHCKSQVPMALQKHEDTDCPCVYVSCPHKCSVOGTLRLSELSSAHLSECVNAPSTC 232
DB 159 RLSISQCHRCAPCSHVDLEVHYEV-CRKEPPLTC-DGCGKKKIPETPDHVRACSKCRVILC 216
QY 233 SFKRYGCVFQGTNOQIKAHBASAVOHVNLKEMSNLEKVS-----LQNESV 282
DB 217 RFRHYGCSSEAVETENLDHQLRLREHLALL--LSFLLEQASPGTLNQGPELDQRQCI 274
QY 283 EKNSSTGLNHQICSEFIEIEROKEMLRNNEKILHLQRYIDSOAEKLEKLYEIRFPKQ 342
DB 275 LEQR-ITFENIYCVLNRREVER-----VAVTARCSRQHLDD----- 312
QY 343 NMEADMSKSVESLQNRVTELESVDKSAGQVARNGLLSQSLRHQMLSVHDIRLADM 402
DB 313 -----KTEALSKNKVOOLE-----RSTGL-----KDLAMADL 338

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QY 403 DLRFQVLETSYNGVILWKIRDYKRRKROEAVMKGKTLISXOPPYTGFGYKMKCARVYLANG 462
DB 339 EQAVSELEVSTYDGVFTWKISDTRKRQEAQVACRTAITSPTATTSRYGKMKCLRYLANG 398
QY 463 DGMKGTHLSLFFVIMRGEYDALLPMPFKQKVTLMMDGSSRRHIGDAFKPDPSNRSK 522
DB 399 DGTGRGTHLSLFFVYVMKGPDALLOMPFNQKVTLMMLDH--NNREHYIDAFRPVDTSSPQ 457
QY 523 KPTGEMNIASGCPYFAQVYLE-NGYIKKDTFFIYIVTSTSL 565
DB 458 RPYSDMNIAAGCPLEFCPSKMEAKNSYRDDALFIRAYIDLTGL 501

RESULT 9
US-08-250-858-4
Sequence 4, Application US/08250858
Patent No. 5708142
GENERAL INFORMATION:
Applicant: Goeddel, David V.
Title of Invention: Tumor Necrosis Factor Receptor-Associated Factors
Number of Sequences: 62
Correspondence Address:
Address: Genentech, Inc.
Street: 460 Point San Bruno Blvd
City: South San Francisco
State: California
Country: USA
ZIP: 94080
COMPUTER READABLE FORM:
Medium Type: 5.25 inch, 360 Kb floppy disk
Computer: IBM PC compatible
Operating System: PC-DOS/MS-DOS
Software: Patin (Genentech)
CURRENT APPLICATION DATA:
Application Number: US/08/250,858
Filing Date: 27-May-1994
Classification: 435
Prior Application Data:
Application Number:
Filing Date:
Attorney/Agent Information:
Name: Dregler, Ginger R.
Registration Number: 33,055
Reference/Docket Number: 897.1
Telecommunication Information:
Telephone: 415/225-3216
Telefax: 415/952-9881
Telex: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 501 amino acids
Type: amino acid
TOPOLOGY: linear
US-08-250-858-4

Query Match      27.8%; Score 837.5; DB 1; Length 501;
Best Local Similarity 33.6%; Pred. No. 1e-66;
Matches 196; Conservative 89; Mismatches 194; Indels 105; Gaps 17;

QY 3 SSKKMSPALQTNPPILKHTDTSAGTPVVPDGGYKEKPKVT-VEKYYKCEKHLVLC 61
DB 2 AAASVSPGSLLELP-----GFSKTLGTLEAKYLCASCKNITLR 42
QY 62 SPKOTEGGRFCESMAALLSSSPKCTAC-----QESI---VKDKVFKDNCCKREIILA 112
DB 43 RPPQACGHRGFCFLTSLSSGPQNCACVYEGLYEBGISLLESSAFPDMAARREVES 102
QY 113 LOIYCRNESRGAEOULTGLHLVHLKNDCHFEELPCVPRDCKEYLRKDLRDHVEKACKY 172
DB 103 LPAYCPND--GCTWKGTLKEYESCHGELCPFLTEC--PACKGLVRLSEKHNTEOECPK 158
QY 173 REATGCHCKSQVPMALQKHEDTDCPCVYVSCPHKCSVOGTLRLSELSSAHLSECVNAPSTC 232

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Db 159 RSLSCQCRACPSHVDLEHYEV-CPKFP LTC-DGCGKKKIPRETQDHRACSKCVC 216
QY 233 SFKRGCVFQGTNOQIKAEHSAVOHYNLKEMSNLEKVS-----LLONESV 282
Db 217 RFRHVGCESEWETENLQDHELQRLREHLAL--LSSELEQAQSPGTLNOVGPPELLQRCQI 274
QY 283 EKNKSIOSLHNOICSFEEIEEROKEMLRNNEKILHLQRYDSQAELKELDEIRPFQ 342
Db 275 LEQK-IATFENIVCVLNRVER-----VAVTAECGRHRLDD 312
QY 343 NWEADSKMSVESLQNRVTELESVKSAGQVARNGLLESQLSRHQMLSVHDIRLADM 402
Db 313 -----KIEALSNKVQOLE-----RSIGL-----KDLAMADL 338
QY 403 DLRFQVLETSYNGVLLIMKTRDYKRRKQEAVMGKTLSTLSQPYTGYFGYKMCARYLNG 462
Db 339 EQKVSLELVSTYDGVFWIMKISDFTKRQEAQVAGTRPAISPAFYTSRYKMKCLRYLNG 398
QY 463 DGMGKGTLSLFEVIMRGEYDALLPMPFKQKVTLMIMDQSSRRHLGDAFKDPNNSSPK 522
Db 399 DGTGRGTHLSLFEVVMKGPNDALLQWPFQKVTLMMLDH-NNREHYIDAFRPDYTSSSFO 457
QY 523 KPTGEMNIASGCPVFAQVLE-NGYIKDDTIFIKVIVDTSDL 565
Db 458 RPYSDMNIASGCPFCPSVKMEKNSYVRDAILFKAIVDLTGL 501

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RESULT 10
US-08-446-915-4
; Sequence 4, Application US/08446915
; Patent No. 5741667
; GENERAL INFORMATION:
; APPLICANT: Goeddel, David V.
; APPLICANT: Rothe, Mike
; TITLE OF INVENTION: Tumor Necrosis Factor Receptor-Associated Factors
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/446, 915
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/250858
; FILING DATE: 27-MAY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/331394
; FILING DATE: 28-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Dieger, Ginger R.
; REGISTRATION NUMBER: 33,055
; REFERENCE/DOCKET NUMBER: 897P2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-3216
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 501 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-446-915-4

```

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Query Match 27.8%; Score 837.5; DB 1; Length 501;
Best Local Similarity 33.6%; Pred. No. 1e-66;
Matches 196; Conservative 89; Mismatches 194; Indels 105; Gaps 17;
QY 3 SSKKMDSPGALQTNPLKLTHTDRSAGTPEVPEQGYEKKEPVKT-VEDKYCECHLVIC 61
Db 2 AAASVTSQSLLELP-----GFSKTLGLTRLEAKYICSCAKNILR 42
QY 62 SPKQTECHRFCESCMAALLSSSPKCTAC-----QEST--VKDRYKDNCKREILA 112
Db 43 RPFQACGHRVCSFCTILSSGPONCAACYEGIEGYSITLSSSAFPDMMARREVS 102
QY 113 LQIVCRNRCGABQDLTGHLVHLKNCHEELPCVAPDCKEYVLRKDLRDHYEAKCY 172
Db 103 LPVCPND--GCTWKGTLKEYESCHGELCPPLTEC--PACKGLVRLSEKHHTEQCPK 158
QY 173 REATCSHCKSQVPMIALQKHEDTDCPCVWSCPHKCSVQTLRLSELSAHLSQVNAFSTC 232
Db 159 RSLSCQCRACPSHVDLEHYEV-CPKFP LTC-DGCGKKKIPRETQDHRACSKCVC 216
QY 233 SFKRGCVFQGTNOQIKAEHSAVOHYNLKEMSNLEKVS-----LLONESV 282
Db 217 RFRHVGCESEWETENLQDHELQRLREHLAL--LSSELEQAQSPGTLNOVGPPELLQRCQI 274
QY 283 EKNKSIOSLHNOICSFEEIEEROKEMLRNNEKILHLQRYDSQAELKELDEIRPFQ 342
Db 275 LEQK-IATFENIVCVLNRVER-----VAVTAECGRHRLDD----- 312
QY 343 NWEADSKMSVESLQNRVTELESVKSAGQVARNGLLESQLSRHQMLSVHDIRLADM 402
Db 313 -----KIEALSNKVQOLE-----RSIGL-----KDLAMADL 338
QY 403 DLRFQVLETSYNGVLLIMKTRDYKRRKQEAVMGKTLSTLSQPYTGYFGYKMCARYLNG 462
Db 339 EQKVSLELVSTYDGVFWIMKISDFTKRQEAQVAGTRPAISPAFYTSRYKMKCLRYLNG 398
QY 463 DGMGKGTLSLFEVIMRGEYDALLPMPFKQKVTLMIMDQSSRRHLGDAFKDPNNSSPK 522
Db 399 DGTGRGTHLSLFEVVMKGPNDALLQWPFQKVTLMMLDH-NNREHYIDAFRPDYTSSSFO 457
QY 523 KPTGEMNIASGCPVFAQVLE-NGYIKDDTIFIKVIVDTSDL 565
Db 458 RPYSDMNIASGCPFCPSVKMEKNSYVRDAILFKAIVDLTGL 501
RESULT 11
US-08-744-139-4
; Sequence 4, Application US/08744139
; Patent No. 5869612
; GENERAL INFORMATION:
; APPLICANT: Goeddel, David V
; APPLICANT: Rothe, Mike
; TITLE OF INVENTION: TUMOR NECROSIS FACTOR RECEPTOR-ASSOCIATED FACTORS
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/744, 139
; FILING DATE: 31-Oct-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/250858

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FILING DATE: 05/27/1994
 ATTORNEY/AGENT INFORMATION:
 NAME: Dreger, Ginger R.
 REGISTRATION NUMBER: 33,055
 REFERENCE/DOCKET NUMBER: P0897C1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415/225-3216
 TELEFAX: 415/952-9881
 TELETYPE: 910/371-7168
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 501 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear
 US-08-744-139-4

Query Match 27.8%; Score 837.5; DB 2; Length 501;
 Best Local Similarity 33.6%; Pred. No. 1e-66;
 Matches 196; Conservative 89; Mismatches 194; Indels 105; Gaps 17;

3 SSKKMDSPGALQTNPLKLTHTDRSAGTPVPEQGGYKEKFKVT-VEDKYKCEKCHLYLC 61
 2 AAASVTSFGSLELLP-----GFSKTLTGTLREAKYLCGACNKLIR 42
 62 SPKQTEGHRFCESCMALLSSSSPKCTAC-----QEST---VKDKYFKDNCKREILA 112
 43 RFOAOCGRHRYCSFCLTSLSSGPONCAACVYEGLYEGISILESSAFPDNAAREVES 102
 113 LQIYGRNRCGAEQTLGHLVHLKNDCHFEELPCVPRPCKEKYLKDLRDHYEKACKY 172
 103 LPVAPND--GCTWKGTLYKEYESCHGLCPFLLTTC--PACKGLVRLSEKHHTEQECRK 158
 173 REATCSHCKSQVPMIALQKHEDTDCPCVVVSCPHKCSVQTLRLSELSAHLSECVNAPSTC 232
 159 RLSLQCHRCAPCSHVDLEHYEV--CPKPLTLC--DGGCKKKIPRETPODHYRACSKCRVLC 216
 233 SFKRYGCVFOGTNOQIKAHESASAVQHVNLKEMSNLSLEKVS-----LLQNESV 282
 217 RFTHTGCESEVETENLODHELQRLREHLALL--LSSFLQAQSPGTLNOVGPPELLQRCOI 274
 283 EKNKSIOSLNOICFELIEIEROKEMLRNNEKSIHLQRYIDSQAELKEIDKEIRPRQ 342
 275 LEOK-IATFENIVCVLNREVER-----VAATAEACSRQHRLDOD----- 312
 343 NMEADSMKSSVESLQNRVTELESVDKSAGQVARNRTGLESQLSRHDMLSVNDIRLADM 402
 313 -----KIEALSNNVQGLE-----RSIGL-----KDLAMADL 338
 403 DLRFVLETSYNGVLIWKIRDYKRRKQEAVMGKTLISQPFYTYGFGYKMCARVYLNG 462
 339 EKVSELEVSITDGVFWIKISDFTKRQEAVALGRTPAIFSPAYTSRYGKMKCLRYVLNG 398
 463 DGMGKTHLSLFVYIMRGEVDALLPMPFKQVYTLMLMDGSSRRHLGDAFPKPPNSSEFK 522
 399 DGTGKTHLSLFVYVWKGPDALLQWPNQVYTLMLLDH--NNREHYIDAFRPDVTSSSFQ 457
 523 KPTGEMNIASGCPVFAQTVLE--NGTYIKDDTIFIKVIVDTSDL 565
 458 RVSMDNTASGCPLEFCPSYKMEAKNSYVRDAIFAIKALVDLTGL 501

RESULT 12
 PCT-US95-06639-4
 Sequence 4, Application PC/TUS9506639
 GENERAL INFORMATION:
 APPLICANT: Genentech, Inc.
 TITLE OF INVENTION: Tumor Necrosis Factor Receptor-Associated Factors
 NUMBER OF SEQUENCES: 66
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 460 Point San Bruno Blvd
 CITY: South San Francisco
 STATE: California

COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: patin (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US95/06639
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/250858
 FILING DATE: 27-MAY-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/331394
 FILING DATE: 28-OCT-1994
 ATTORNEY/AGENT INFORMATION:
 NAME: Dreger, Ginger R.
 REGISTRATION NUMBER: 33,055
 REFERENCE/DOCKET NUMBER: 897P2PCT
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415/225-3216
 TELEFAX: 415/952-9881
 TELETYPE: 910/371-7168
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 501 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 PCT-US95-06639-4

Query Match 27.8%; Score 837.5; DB 5; Length 501;
 Best Local Similarity 33.6%; Pred. No. 1e-66;
 Matches 196; Conservative 89; Mismatches 194; Indels 105; Gaps 17;

3 SSKKMDSPGALQTNPLKLTHTDRSAGTPVPEQGGYKEKFKVT-VEDKYKCEKCHLYLC 61
 2 AAASVTSFGSLELLP-----GFSKTLTGTLREAKYLCGACNKLIR 42
 62 SPKQTEGHRFCESCMALLSSSSPKCTAC-----QEST---VKDKYFKDNCKREILA 112
 43 RFOAOCGRHRYCSFCLTSLSSGPONCAACVYEGLYEGISILESSAFPDNAAREVES 102
 113 LQIYGRNRCGAEQTLGHLVHLKNDCHFEELPCVPRPCKEKYLKDLRDHYEKACKY 172
 103 LPVAPND--GCTWKGTLYKEYESCHGLCPFLLTTC--PACKGLVRLSEKHHTEQECRK 158
 173 REATCSHCKSQVPMIALQKHEDTDCPCVVVSCPHKCSVQTLRLSELSAHLSECVNAPSTC 232
 159 RLSLQCHRCAPCSHVDLEHYEV--CPKPLTLC--DGGCKKKIPRETPODHYRACSKCRVLC 216
 233 SFKRYGCVFOGTNOQIKAHESASAVQHVNLKEMSNLSLEKVS-----LLQNESV 282
 217 RFTHTGCESEVETENLODHELQRLREHLALL--LSSFLQAQSPGTLNOVGPPELLQRCOI 274
 283 EKNKSIOSLNOICFELIEIEROKEMLRNNEKSIHLQRYIDSQAELKEIDKEIRPRQ 342
 275 LEOK-IATFENIVCVLNREVER-----VAATAEACSRQHRLDOD----- 312
 343 NMEADSMKSSVESLQNRVTELESVDKSAGQVARNRTGLESQLSRHDMLSVNDIRLADM 402
 313 -----KIEALSNNVQGLE-----RSIGL-----KDLAMADL 338
 403 DLRFVLETSYNGVLIWKIRDYKRRKQEAVMGKTLISQPFYTYGFGYKMCARVYLNG 462
 339 EKVSELEVSITDGVFWIKISDFTKRQEAVALGRTPAIFSPAYTSRYGKMKCLRYVLNG 398
 463 DGMGKTHLSLFVYIMRGEVDALLPMPFKQVYTLMLMDGSSRRHLGDAFPKPPNSSEFK 522
 399 DGTGKTHLSLFVYVWKGPDALLQWPNQVYTLMLLDH--NNREHYIDAFRPDVTSSSFQ 457
 523 KPTGEMNIASGCPVFAQTVLE--NGTYIKDDTIFIKVIVDTSDL 565

Db 187 LRVF-----ANIVAVLNKEVE-----ASHLALAASHOSOLDREHLLSLEOR 228

Qy 389 ----DOMLSVHDIRLADMRLFOVLETAASYNGVLIIMKIRDYKRRQEAVMGKTLSTYSOP 444

Db 229 VVELQOTTLAQKDOYLGKLEHSLRLMEASFDDTFLMKITNTVKRCHESVCGRTVSLFSPA 288

Qy 445 FYTGYPGYKMCARVYLNGDGMKGTHLSLFVIMRGEYDALLPMPFKOKVTLMMDQSS 504

Db 289 FYTAKGYKLCRLYLNGDGSCKKTHLSLFVIMRGEYDALLPMPFRNKVTFMLDDQ--NN 347

Qy 505 RRLHGDAPKDPNNSSEFKKPTGEMINASGCPVYAQTULEN--GTIYKDDTIFIKYIVDT 562

Db 348 REHAIDAFRDLSSASFQRPQSETNVASGCPLEFPLSKLOSPKHAHYKDDTIFELCIYDT 407

Qy 563 S 563

Db 408 S 408

RESULT 15

US-08-446-915-2
 ; Sequence 2, Application US/08446915
 ; Patent No. 5741667
 ;
 ; GENERAL INFORMATION:
 ; APPLICANT: Goeddel, David V.
 ; APPLICANT: Rothe, Mike
 ; TITLE OF INVENTION: Tumor Necrosis Factor Receptor-Associated Factors
 ; NUMBER OF SEQUENCES: 66
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 460 Point San Bruno Blvd
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ;
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 5.25 Inch, 360 Kb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: palin (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/446,915
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/250858
 ; FILING DATE: 27-MAY-1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/331394
 ; FILING DATE: 28-OCT-1994
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Dreger, Ginger R.
 ; REGISTRATION NUMBER: 33,055
 ; REFERENCE/DOCKET NUMBER: 897P2
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 415/225-3216
 ; TELEFAX: 415/952-9881
 ; TELE: 910/371-7168
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 409 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; US-08-446-915-2

Query Match

Best Local Similarity 36.6%; Score 628; DB 1; Length 409;

Matches 154; Conservative 69; Mismatches 128; Indels 70; Gaps 13;

Qy 173 REATCSHCKSGVPMIALQKHEDTDCPCVYVSCPHKCSVQTLRLSELSAHLSECVNAPSTC 232

Db 28 RVLCTACTLSE-----NLRDDEDRICPKCRADNLHPVSPGSLTIOE-KVH--SDVAEALIMC 81

Qy 233 SFKRYGVFGSTNOQIKAHAEASAVOHVNL-----LKEMSNS-----LEKVSLL 277

Db 82 PFAVGCSFKSSPSSMOBHEATSSSHLYLLAVLAKEMKSSPGSNLGSAPMALERNLSEL 141

Qy 278 QNESVEKNKRSIQSLHNOICSEFEIEROKEMLRNNEKRIHLQVIDSOAEK--LKEIDKE 336

Db 142 Q-----LQAAVEATGDLEVDCYRAPCESEQELALQHVK-----EKLALQLEEK 186

Qy 337 IRPRQMKKEADSKSSVESLQNRVTELESYDASAGVARNRTGLLESQSRH----- 388

Db 187 LRVF-----ANIVAVLNKEVE-----ASHLALAASHOSOLDREHLLSLEOR 228

Qy 389 ----DOMLSVHDIRLADMRLFOVLETAASYNGVLIIMKIRDYKRRQEAVMGKTLSTYSOP 444

Db 229 VVELQOTTLAQKDOYLGKLEHSLRLMEASFDDTFLMKITNTVKRCHESVCGRTVSLFSPA 288

Qy 445 FYTGYPGYKMCARVYLNGDGMKGTHLSLFVIMRGEYDALLPMPFKOKVTLMMDQSS 504

Db 289 FYTAKGYKLCRLYLNGDGSCKKTHLSLFVIMRGEYDALLPMPFRNKVTFMLDDQ--NN 347

Qy 505 RRLHGDAPKDPNNSSEFKKPTGEMINASGCPVYAQTULEN--GTIYKDDTIFIKYIVDT 562

Db 348 REHAIDAFRDLSSASFQRPQSETNVASGCPLEFPLSKLOSPKHAHYKDDTIFELCIYDT 407

Qy 563 S 563

Db 408 S 408

Search completed: December 19, 2002, 14:56:21
 Job time: 18 secs

